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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/816,745	03/26/2001	Mamoru Sawada	I-120	6536

23400 7590 07/17/2002
LAW OFFICE OF DAVID G. POSZ
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EXAMINER

LE, DANG D

ART UNIT PAPER NUMBER

2834

DATE MAILED: 07/17/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/816,745

Applicant(s)

SAWADA ET AL.

Examiner

Dang D Le

Art Unit

2834

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 24 June 2002.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-7 is/are pending in the application.
- 4a) Of the above claim(s) 7 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-3 and 6 is/are rejected.
- 7) ☒ Claim(s) 4 and 5 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 26 March 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Election/Restrictions

1. Claim 7 is withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected group II, there being no allowable generic or linking claim. Election was made **without** traverse in Paper No. 4.

Claim Objections

2. Claims 4 and 5 are objected to under 37 CFR 1.75(c) as being in improper form because a multiple dependent claim cannot depend from any other multiple dependent claim. See MPEP § 608.01(n). Accordingly, the claims have not been further treated on the merits.
3. Claims 1 and 2 are objected to because of the following informalities:
 - Claim 1, line 3, replace "motor" with -- rotor --.
 - Claim 2, line 3, delete "makes" Appropriate correction is required.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 1-3 and 6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Discenzo et al. in view of Luedtke et al.

Regarding claim 1, Discenzo et al. show a motor coil-shortening detecting unit, comprising:

- A motor (30) including a rotor;
- A detecting means (Figure 3) that detects a current or a voltage supplied to the motor from a power source (through cable 36, Figure 1);
- A determining means (88, 90) that determines a short of the motor coils by comparing the detected voltage or current obtained by the detecting means with a respective pre-stored voltage or current (column 7, line13), said pre-stored voltage or current representative of that supplied from the external power source during a normal state (column 4, lines 55-65 and column 7, lines 10-25).

Discenzo et al. do not show:

- A wire wrapped around said motor (or rotor ?);
- A commutator provided on the rotor;
- A brush that slides over the commutator, electric power being supplied to the rotor from an external power source via the commutator and brush to rotate the rotor. (Discenzo et al. do not clearly show if the motor is brush or brushless motor.)

Luedtke et al. show a wire wrapped around said motor (Figure 1), a commutator (22) provided on the rotor; a brush (24) that slides over the commutator, electric power being supplied to the rotor from an external power source (through cable 40) via the commutator and brush to rotate the rotor for the purpose of making a brush motor.

Since Discenzo et al. and Luedtke et al. are all from the same field of endeavor; the purpose disclosed by one inventor would have been recognized in the pertinent art of the others.

It would have been obvious at the time the invention was made to a person having ordinary skill in the art to wrap a wire around the motor, to provide a commutator on the rotor with a brush that slides over the commutator, electric power being supplied to the rotor from an external power source via the commutator and brush to rotate the rotor as taught by Luedtke et al. for the purpose discussed above.

Regarding claim 2, it is noted that Discenzo et al. also show the determining means determining the short based on ripple variations of the current or voltage supplied to the motor from the external power source, the ripple variations being detected by the detecting means (column 7).

Regarding claim 3, it is noted that Discenzo et al. also show the determining means including a temperature correction circuit for correcting the pre-stored current or voltage according to a circumferential temperature (82, 84, 86).

Regarding claim 6, the claim is similar to claim 1 except that it further recites an indication device responsive to said determining device that indicates when said short exists. It is noted that Discenzo et al. also show an indication device (42) responsive to said determining device that indicates when said short exists

Information on How to Contact USPTO

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6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dang D Le whose telephone number is (703) 305-0156. The examiner can normally be reached on Monday through Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nestor Ramirez can be reached on (703) 308-1371. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 308-7382 for regular communications and (703) 308-7382 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-1782.

DDL
July 14, 2002

DL

Dang D. Le